WE CLAIM:

1 1.   An offshore platform comprising:

2   (A)   a deck for supporting hydrocarbon exploration,

3 drilling or production equipment;

4   (B)   a buoyant member;

5   (C)   an open support structure positioned between

6 the deck and buoyant member, comprising an upper end

7 connected to the deck, and comprising a lower end

8 connected to the buoyant member;

9   (D)   a plurality of tendons connected to the buoyant

10 member suitable for anchoring the platform;

11   wherein when the platform is positioned offshore,

12 the deck is supported above the waterline, the upper end

13 of the open structure is positioned above the water line,

14 with the lower end positioned at least 100 feet below the

15 waterline; and the heave resonance of the platform is at

16 least 6 seconds.

1   2.   The platform of claim 1, wherein the heave resonance

2   of the platform is in the range of about 6 to about 10

3   seconds.

1   3.   The platform of claim 1, wherein the heave resonance

2   of the platform is in the range of about 7 to about 9

3   seconds.

1   4.   The platform of claim 1, wherein when the platform

2   is positioned offshore, the lower end is positioned at

3   least 150 feet below the waterline.

1   5.   The platform of claim 4, wherein the heave resonance

2   of the platform is in the range of about 6 to about 10

3   seconds.

1   6.   The platform of claim 4, wherein the heave resonance

2   of the platform is in the range of about 7 to about 9

3   seconds.

1   7.   The platform of claim 1, wherein when the platform

2   is positioned offshore, the lower end is positioned at

3   least 200 feet below the waterline.

1   8.   The platform of claim 7, wherein the heave resonance

2   of the platform is in the range of about 6 to about 10

3   seconds.

1   9.   The platform of claim 7, wherein the heave resonance

2   of the platform is in the range of about 7 to about 9

3   seconds.

1   10.   A method of exploring an offshore target zone for

2   hydrocarbons, the method comprising:

3   (A)   positioning a platform offshore near the target

4   zone;

5   (B)   conducting exploration activities from the

6   platform,

7   wherein the platform comprises:

8   (i) a deck for supporting hydrocarbon

9   exploration equipment;

10   (ii) a buoyant member;

11   (iii)   an open support structure positioned

12   between the deck and buoyant member,

13   comprising an upper end connected to the deck,

14   and comprising a lower end connected to the

15   buoyant member;

16   (iv) a plurality of tendons connected to the

17   buoyant member suitable for anchoring the

18   platform;

19   wherein when the platform is positioned

20   offshore, the deck is supported above the

21   waterline, the upper end of the open structure is

22   positioned above the water line, with the lower

23   end positioned at least 100 feet below the

24   waterline; and the heave resonance of the platform

25   is at least 6 seconds.

1   11.   The method of claim 10, wherein the heave resonance

2   of the platform is in the range of about 6 to about 10

3   seconds.

1   12.   The method of claim 10, wherein the heave resonance

2   of the platform is in the range of about 7 to about 9

3   seconds.

1   13.   The method of claim 10, wherein when the platform is

2   positioned offshore, the lower end is positioned at least

3   150 feet below the waterline.

1   14.   The method of claim 13, wherein the heave resonance

2   of the platform is in the range of about 6 to about 10

3   seconds.

1   15.   The method of claim 13, wherein the heave resonance

2   of the platform is in the range of about 7 to about 9

3   seconds.

1   16.   The method of claim 10, wherein when the platform is

2   positioned offshore, the lower end is positioned at least

3   200 feet below the waterline.

1   17.   The method of claim 16, wherein the heave resonance

2   of the platform is in the range of about 6 to about 10

3   seconds.

1   18.   The method of claim 16, wherein the heave resonance

2   of the platform is in the range of about 7 to about 9

3   seconds.

1   19.   A   method   of   drilling   for   or   production   of

2   hydrocarbons from an offshore target zone, the method

3   comprising:

4   (A)   positioning a platform offshore near the target

5   zone;

6   (B)   conducting drilling or production activities

7   from the platform,

8   wherein the platform comprises:

9   (i) a deck for supporting hydrocarbon

10   exploration equipment;

11   (ii) a buoyant member;

12   (iii)   an open support structure positioned

13   between the deck and buoyant member,

14   comprising an upper end connected to the deck,

15   and comprising a lower end connected to the

16   buoyant member;

17   (iv) a plurality of tendons connected to the

18   buoyant member suitable for anchoring the

19   platform;

20   wherein when the platform is positioned

21   offshore, the deck is supported above the

22   waterline, the upper end of the open structure is

23   positioned above the water line, with the lower

24   end positioned at least 100 feet below the

25   waterline; and the heave resonance of the platform

26   is at least 6 seconds.

1   20.   The method of claim 19, wherein the heave resonance

2   of the platform is in the range of about 6 to about 10

3   seconds.

1   21.   The method of claim 19, wherein the heave resonance

2   of the platform is in the range of about 7 to about 9

3   seconds.

1   22.   The method of claim 19, wherein when the platform is

2   positioned offshore, the lower end is positioned at least

3   150 feet below the waterline.

1   23.   The method of claim 22, wherein the heave resonance

2   of the platform is in the range of about 6 to about 10

3   seconds.

1   24.   The method of claim 22, wherein the heave resonance

2   of the platform is in the range of about 7 to about 9

3   seconds.

1   25.   The method of claim 19, wherein when the platform is

2   positioned offshore, the lower end is positioned at least

3   200 feet below the waterline.

1   26.   The method of claim 25, wherein the heave resonance

2   of the platform is in the range of about 6 to about 10

3   seconds.

1   27.   The method of claim 25, wherein the heave resonance

2   of the platform is in the range of about 7 to about 9

3   seconds.